

**Notice of Allowability**

Application No.

09/922,099

Applicant(s)

HUANG ET AL.

Examiner

Art Unit

Negussie Worku

2625

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 12/20/06.
2. ☒ The allowed claim(s) is/are 1-3,5-7,9-11,16-19,21 and 22.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some\* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |  |   |
|--|---|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 5. <input type="checkbox"/> Notice of Informal Patent Application                     |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____ |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),<br>Paper No./Mail Date _____    | 7. <input type="checkbox"/> Examiner's Amendment/Comment                              |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance  |
|  | 9. <input type="checkbox"/> Other _____   |

## **DETAILED ACTION**

### ***Reasons for Allowance***

1. The following is an examiner's statement of reasons for allowance: In response to the Office action dated 11/17/06, and further to the amendments filed on 12/20/06, applicant's election of group I directed to claims 1-3, 5-11, 16-19, 21 and 22, is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP 818.03(a)).

According to applicant's response dated on 4/19/06, claims 16, 17, 18, 19 and 21 has been written in independent form, in order to include the objected claims having allowable subject matter, as discussed in page 13-14 of applicant's amendment dated on 09/19/06. Claims 16, 17, 18, 19 and 21 are currently pending in independent form, including dependent claims 1-3, 5-7, 9-11 and 22, in which, claims 4, 8, 12-15, 20 and 23-25 are cancelled.

Therefore, the above-indicated claims 1-3, 5-7, 9-11, 16-19, 21 and 22 are allowed for the reasons as follows:

With respect to claim 1-3 and 16 [16 is independent] the prior art searched and of record neither anticipates nor suggests an image processor, capable of calculating an optical path deviation based at least in part on the calibrated image to adjust the

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scanned image, and wherein the set of calibration photosensitive devices comprises a plurality of calibration photosensitive devices arranged at two sides of the set of scan photosensitive devices in an  $L \times K$  array, wherein  $L$  and  $K$  are integers larger than 1.

As to claim 17, an image processor, capable of calculating an optical path deviation based at least in part on the calibrated image to adjust the scanned image; and wherein, the set of scan photosensitive devices comprise a plurality of scan photosensitive-devices, and wherein the calibration photosensitive devices have a dimension smaller than that the scan photosensitive device is not taught or suggested by the prior art searched and of record.

Regarding claims 5-7 and 18 [18 independent] the prior art do not teach or suggest an image processor, capable of calculating an optical path deviation based at least in part on the calibrated image to adjust the scanned image; and wherein the one or more calibration boards have a strip shape and a width increasing along a scanning direction.

As to claims 9-11 and 19 [19 independent] the prior art searched or do not teach or suggest an image processor, capable of calculating an optical path deviation based at least in part on the calibrated image to adjust the scanned image; and wherein the one or more calibration boards have a strip shape and a width decreasing along a scanning direction.

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Regarding claims 21-22, the prior art searched or do not teach or suggest calculating the optical path deviation in a y-axis according to the displacement of the calibrated image detected by the set of calibration photosensitive devices; and calculating the optical path deviation in a z-axis according to the displacement of the calibrated image detected by the set of calibration photosensitive devices.

2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Negussie Worku whose telephone number is 571-272-7472. The examiner can normally be reached on flex.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Aung Moe can be reached on 571-272-7314. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

*Negussie Worku*  
2/14/07

*Aung S. Moe*  
AUNG S. MOE  
SUPERVISORY PATENT EXAMINER  
2/16/07